R307. Environmental Quality, Air Quality.

R307-352. Metal Container, Closure, and Coil Coatings.

# R307-352-1. Purpose.

The purpose of this rule is to reduce volatile organic compound (VOC) emissions from the coating of metal coils, cans, pails, and lids in the manufacturing or reconditioning process.

### R307-352-2. Applicability.

[(1)—]R307-352 applies to sources located in <u>Box Elder</u>, Cache, Davis, Salt Lake, <u>Tooele</u>, Utah and Weber counties that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.

[ (2) In Box Elder and Tooele counties, R307-352 applies to the following sources:

(a) Existing sources as of February 1, 2013 with the potential to emit 5 tons per year or more of VOC, including related cleaning activities; and

(b) New sources as of February 1, 2013 that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.

#### R307-352-3. Definitions.

The following additional definitions apply to R307-352:

"Coating" means a protective, functional or decorative film applied in a thin layer to a surface.

"End sealing compound" means a compound which is coated onto can ends and which functions as a gasket when the end is assembled onto the can.

"Exterior body spray" means a coating sprayed on the exterior of the container body to provide a decorative or protective finish.

"Interior body spray" means a coating sprayed on the interior of the can body to provide a protective film between the product and the can.

"Metal container or closure coating" means any coating applied to either the interior or exterior of formed metal cans, pails, lids or crowns or flat metal sheets which are intended to be formed into cans, pails, lids or crowns.

"Overvarnish" means a coating applied directly over a design coating to reduce the coefficient of friction, to provide gloss and to protect the finish against abrasion and corrosion.

"Reconditioned pails or lids" means any metal container which is reused, recycled or remanufactured.

"Three-piece can side-seam coating" means a coating sprayed on the exterior and/or interior of a welded, cemented or soldered seam to protect the exposed metal.

"Two-piece can exterior-end coating" means a coating applied to the exterior bottom end of a can to reduce the coefficient of friction and to provide protection to the metal.

### R307-352-4. [Emission Standards] VOC Content Limits.

Each owner or operator shall not apply coatings with a VOC content in excess of the amounts specified in Table 1 or shall use an add-on control device as specified in R307-352-6.

#### TABLE 1

METAL CONTAINER AND CLOSURE COIL COATING LIMITATIONS (values in pounds VOC per gallon of coating, minus water and exempt solvents (compounds not classified as VOC), as applied)

COATING CATEGORY VOC [EMISSION RATES] CONTENT LIMITS CANS Sheet basecoat (interior and exterior) and overvarnish 1.9 Two-piece can exterior basecoat, overvarnish, and end coating 2.1 Interior body spray 3.5 Two-piece cans Three-piece cans 3.0 Three-piece can side seam spray 5.5 End sealing compound: Food cans, non-food 0.1 cans, and beverage cans Exterior body spray 3.5 PAILS AND LIDS Body spray 4.2 Reconditioned interior 3.5 Reconditioned exterior New interior 3.5 2.8 New exterior End sealing compound 0.5 Inks, all applications 2.5 Coil Coil coating 1.7

# R307-352-5. Work Practices and Recordkeeping.

- (1) The owner or operator shall:
- (a) Store all VOC-containing coatings, thinners, and cleaning materials in closed containers;
  - (b) Minimize spills of VOC-containing coatings, thinners, and

cleaning materials;

- (c) Clean up spills immediately;
- (d) Convey any coatings, thinners, and cleaning materials in closed containers or pipes;
- (e) Close mixing vessels that contain VOC coatings and other materials except when specifically in use; and
- (f) Minimize usage of solvents during cleaning of storage, mixing, and conveying equipment.
- (2) No person shall apply any coating unless the coating application method achieves a demonstrated 65% transfer efficiency.

The following applications achieve a minimum of 65% transfer efficiency and shall be operated in accordance with the manufacturers specifications:

- (a) Electrostatic application;
- (b) Flow coat;
- (c) Roll coat;
- (d) Dip coat;
- (e) High-volume, low-pressure (HVLP) spray;
- (f) Hand application methods;
- (g) Printing techniques; or
- (h) Other application method capable of achieving at least 65% transfer efficiency, as certified by the manufacturer.
- (3) All persons shall perform solvent cleaning operations with cleaning material having VOC content of 0.21 lb/gallon or less.
- (4) All sources subject to R307-352 shall maintain records demonstrating compliance with  $\left[\frac{\text{all provisions of}}{\text{and R307-352-5}}\right]$  R307-352-4 and R307-352-5  $\left[\frac{\text{on an annual basis}}{\text{on an annual basis}}\right]$ .
- (a) Records shall include, but not be limited to, inventory and product data sheets of all coatings and solvents subject to R307-352.
- (b) These records shall be made available to the director upon request.

# R307-352-6. [Optional ] Add-On Control[s] Systems Operations.

- [ (1) The owner or operator may install and maintain an incinerator, carbon adsorption, or any other add-on emission control device, provided that the emission control device will attain at least 90% efficiency performance.
- (2) The owner or operator of a control device shall provide documentation that the emission control system will attain the requirements of R307-352-6.
- (3) Emission control systems shall be operated and maintained in accordance with the manufacturer recommendations. The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.
- (1) The owner or operator shall install and maintain an incinerator, carbon adsorption, or any other add-on emission control system, provided that the emission control system is operated and maintained in accordance with the manufacturer recommendations in order to maintain at least 90% capture and control efficiency. Determination of overall capture and control efficiency shall be

determined using EPA approved methods, as follows.

- (a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable. (b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.
- (c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.
- (2) The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-352-6(1).
- (3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-352-6. Key system parameters may include, but are not limited to, temperature, pressure and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the manufacturer's recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.
- (4) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

### [R307-352-7. Compliance Schedule.

All sources within Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties shall be in compliance with this rule by January 1, 2014.

KEY: air pollution, emission controls, metal containers, coil coatings

Date of Enactment or Last Substantive Amendment: [February 1, 2013]2014

Authorizing, and Implemented or Interpreted Law: 19-2-104(1)(a)